

for U. S. Cerambycidae. It was collected by us in May 1972 on trunks of living ebony blackbead trees, *Pithecellobium flexicaule* (Benth.) in Bentsen Rio Grande Valley State Park, Hidalgo County, Texas. Six specimens were taken at that time, 2 more the following year by A. E. Lewis. The identification was verified by E. G. Linsley.

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¹Also 4 males, same locality, reared from *Salix* logs, emerged 12-IX-75 and 5, 10-I-76 (E. Giesbert and F. Hovore).

INSTANT RELAXING OF INSECTS

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A recurring problem for coleopterists, and particularly for students of Staphylinidae, is that in dried mounted specimens important structures are often obscured by appendages or by curling or twisting of the specimen at death. In many staphylinids it is necessary to lift the front coxae to determine the structure of the intercoxal parts. In some linear species poorly mounted specimens may have much of the under surface hidden because of

their tendency to curl on drying. In other Coleoptera a leg may hide an important suture; or it may be advantageous to reposition an antenna for comparison of the segments or to make a drawing. In such cases it is necessary to relax the specimen in order to realign the parts. There are several widely used methods of doing this, almost all of them tedious and time-consuming.

A method which greatly simplifies and at the same time improves on previous processes was reported in Wheeler and Wheeler (1963), a work unlikely to come to the attention of general entomologists. They said on page 42, "Relaxing fluid: 380 ml 95% alcohol; 230 ml water; 95 ml ethyl acetate; 7 ml benzene. Dip a small water-color brush (or even a dissecting needle) in the fluid and touch it to the part of the ant to be relaxed. The effect is almost instantaneous, but for the sake of safety one should wait at least a minute." On trying this method we found it so immediately effective that we wish to call it to the attention of Coleopterists.

We noticed that the formula was similar to that of Barber's solution. On applying a drop of Barber's solution with a small camel's hair brush to the antenna of a medium sized (5 mm) staphylinid we got complete flexibility in 3 seconds. Barber's solution, which is widely used as a preservative because specimens remain completely relaxed in it, can be made by the following formula:

15 parts 50% alcohol
3 parts ethyl acetate
1 part benzene

Newton and Peck (1975) suggested the following preservative for keeping specimens relaxed:

70% acetone
25% water
5% benzene

We found that this was an equally effective relaxing fluid when used in the same manner; toluene or xylene may be substituted for the highly toxic benzene, but neither is as satisfactory. This substitution was not possible with either Wheelers' solution or Barber's solution.

To move legs by this method it is necessary to allow about one minute as suggested by the Wheelers. The union of head and thorax and that of prothorax and mesothorax also require more time for full relaxation. Do not allow the fluid to dissolve the glue securing the insect to the point, and do not move appendages to which relaxing fluid has not been directly applied. With a little care, the major body parts of poorly mounted specimens can be realigned and when moved to their new positions tend to remain there, thus transforming what may have been almost useless material into splendid museum specimens.

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